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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/571,866	03/14/2006	Sarah Veelaert	19790-007US1 CER03-0011	6957

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EXAMINER	
QIAN, YUN	
ART UNIT	PAPER NUMBER
1793	

NOTIFICATION DATE	DELIVERY MODE
04/28/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

Office Action Summary	Application No.	Applicant(s)	
	10/571,866	VEELAERT ET AL.	
	Examiner	Art Unit	
	YUN QIAN	1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on *08 April 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *18-45* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *18-45* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Status of Claims

Applicant's Request for Continue Examination (RCE) filed on April 8, 2009 has been considered. Claims 18-45 are remained for examination.

Previous Grounds of Rejection

Regarding claims 18-38, 40-41 and 43-45, the rejection under 35 U.S.C. 103(a) as being unpatentable over Wasserman et al (US 5,959,102) in view of Kettlitz et al (US 6,235,894) stands as generally set in the final office action mailed on January 8, 2008.

Regarding claims 39-40 and 42, the rejection under 35 U.S.C. 103(a) as being unpatentable over Wasserman et al in view of Kettlitz et al., further in view of Wongsuragrai et al (EP 0823439), as discussed above, applicants have not fully demonstrated a surprising difference in stability by comparing with the prior art of record, the rejections stands as generally set forth in the final office action mailed on July 21, 2008.

New Grounds of Rejection

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 18, 20-22, 25-26, 30-31, 38, 40 and 43-45 are rejected under 35 U.S.C. 102(b) as being anticipated by Fitt et al. (5,385,608).

Regarding claim 18, Fitt et al. teaches a method of purifying raw starch comprising steps of (a) treated with hypochlorite (a reactant), (b) removing protein and oxidizing some of the hydroxyl groups, (c) recovering the purified starch(abstract and Fig.1).

Regarding claims 20-22 and 25-26, the process taught by Fitt et al. is performed at 47^0C, pH 6.4 for 30 min in presence of hypochlorite and alkaline solution. It meets the claimed limitations (col.8, lines 4-60).

Regarding claims 30-31, the process taught by Fitt et al. is used for treatment of waxy corn, corn and various cereals (col.4, lines 9-13).

Regarding claim 38, the purified starch taught by Fitt et al. are characterized by a protein content of <0.15%wt, and hydroxyl group oxidized to a level about 0.03%-0.5%wt. Protein content can be reduced further by washing with water (abstract).

Regarding claim 40, the modified starch taught by Fitt et al. are suitable for medical, consumer and industrial applications such as lubricating gloves (abstract).

Regarding claims 43-45, product-by-process limitation in these claims are noted. It is considered while the product of the reference is made by a different process, the product made and disclosed is the same as being claimed. see "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The

patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." (In re Thorpe, 227 USPQ 964,966). Once the Examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious different between the claimed product and the prior art product (In re Marosi, 710 F.2d 798, 802,218 USPQ 289, 292 (Fed. Cir. 1983), MPEP 2113)

Claims 18-23, 25-26, and 40-41 are rejected under 35 U.S.C. 102(b) as being anticipated by Gabel et al. (3,607,393).

Regarding claim 18, Gabel et al. teaches a method of purifying raw starch comprising steps of (a) treated with hypochlorite (a reactant), (b) oxidizing with hydrogen peroxide, (c) recovering the purified starch (abstract).

Regarding claim 19, the amount of chlorine taught by Gabel is 0.05-5.50% as per applicant claim 19 (col. 2, line54-55).

Regarding claims 20-23 and 25-26, the process taught by Gabel et al. is performed at about 20-60 ^{0}C, pH 1-8 for 5-45 min in presence of alkaline metal hypochlorite solution and hydrogen peroxide. It meets the claimed limitations (abstract, col.2, lines 10-66).

Regarding claims 40-41, the process taught by Gabel et al. is used for preparing bread (abstract).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 18-23, 25-27, 29, 32 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Russell et al. (Journal of Cereal Science 5, 1987, 83-100).

Regarding claims 18-23, 25-27, 29, 32, 35 and 37, Russell et al. teaches a method of treating native starch with (1) 300 ppm (0.3 g/Kg based on the weight of the starch) of chlorine gas at 22^0C for 18 hrs, and (2) treating the resulted chlorinated starch with Pronase (a protease) at pH 8.3 (page 85 Figure 1, and page 87, 2^{nd} and 3^{rd} paragraphs)

The apparent difference between the applicant's claims 18, 32, 35 and 37 and the teaching from the reference is the order of addition of additives (chlorine) and protease. However, the change in sequence of adding ingredients would have been obvious to one of ordinary skill in the art absent evidence to the contrary. The following is a quotation of MPEP 2144.04 which forms the basis for the rejection: "In re Burhans, 154 F.2d 690, 69 USPQ 330 (CCPA 1946) (selection of any order of performing process steps is prima facie obvious in the absence of new or unexpected results); In re Gibson, 39 F.2d 975, 5 USPQ 230

(CCPA 1930) (Selection of any order of mixing ingredients is prima facie obvious.)".

Although Russell et al. does not disclose the physical properties (i.e. viscosity, setting property, protein content) as per claims 29, 32 and 35, Russell et al. teaches all of the claimed reagents (active chlorine and protease) and treatment conditions (temperature, pH, time, amount of chlorine), therefore, the physical properties of purified starches would necessarily follow.

Response to Arguments

with regards to the previous Grounds of Rejection

Applicants argue that neither Wasserman et al nor Kettlitz et al. teaches "**converting** organoleptic impurities and/or precursors of organoleptic impurities into hydrolyzed or oxidatively-degraded organoleptic impurities and/or hydrolyzed or oxidatively-degraded precursors of organoleptic impurities" as per applicant claims 18, 32, 35 and 37. This is not persuasive because the claims are directed towards a process for preparing stabilized starches, involving steps of (a) treating raw starch with a reactant, (b) bleaching, (c) recovering stabilized starches.

Both Wasserman et al and Kettlitz et al. teach methods for purifying raw starches, the combined process discloses the same reactants (protease enzyme and active chlorine), and applies the same process conditions (temperature and pH) as the instant application. As a result, the purified starches taught by prior arts are highly desirable incorporated into food products, which are the same as the instant application.

Therefore, these chemical treatments taught by prior arts involve steps of "converting" and "removing" as per instant. In addition, even the applicant also states "any alternative treatment is part of the current invention as long as the starch is freed from originally present organoleptic impurities and/or precursors……." (Detailed Description Section, [0051]).

Applicants argue that the claimed processes are not obvious, in part, because leaving residual impurities in the starch would not expect to improve the properties of the starch. Applicants assert the experimental condition of the control run in the instant application (Example 1, [0075]-[0183]) is the same as the prior art by Kettlitz et al. (Example 1, col.6, and lines 1-25).

This is not persuasive because the example taught by Kettlitz et al. is quite different from the control run of the instant application, as discussed in the final office action mailed on January 8, 2008. For example, the concentration of active chloride and pH value are not same. Therefore, applicants have not fully demonstrated a surprising or unexpected difference in stability by comparing with the prior art of record.

Applicants argue that nothing in the combination of references would suggest the claimed process. This is not persuasive because both Wasserman et al and Kettlitz et al. teach methods for purifying raw starches and it would have a reasonable expectation of success, particularly in view of the fact that:

"It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third

composition to be used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art." In re Kerkhoven, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980) (MPEP 2144.06).

Conclusion

The rejection under 35 U.S.C 112(2) with respect to claim 43-45 has been withdrawn.

Regarding claims 18-38, 40-41 and 43-45, the rejection under 35 U.S.C. 103(a) as being unpatentable over Wasserman et al (US 5,959,102) in view of Kettlitz et al (US 6,235,894) stands.

Regarding claims 39-40 and 42, the rejection under 35 U.S.C. 103(a) as being unpatentable over Wasserman et al in view of Kettlitz et al., further in view of Wongsuragrai et al (EP 0823439) stands

New grand rejections with respect to claims 18-23, 25-27, 32 and 37 under 35 U.S.C. 102(b) as being anticipated by Fitt et al. is discussed above.

New grand rejections with respect to claims 18-23, 25-26, and 40-41 are rejected under 35 U.S.C. 102(b) as being anticipated by Gabel et al. (3,607,393) is discussed above.

New grand rejections with respect to claims 18-23, 25-27, 29, 32 and 37 are rejected under 35 U.S.C. 102(b) as being unpatentable over Russell et al

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YUN QIAN whose telephone number is

(571)270-5834. The examiner can normally be reached on Monday-Thursday, 10:00am -4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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